

58028. HYPHAENE CRINITA Gaertn.
Phenicaceae. Palm.

From Pretoria, Union of South Africa. Seeds presented by C. P. Lounsbury, Chief, Division of Entomology. Received October 4, 1923.

A South African fan palm which in some sections of its native country reaches a height of 30 feet. The leaves are used by the natives to make matting, basketware, and rope. From the sap, obtained by tapping the trunk, a native beverage is prepared. (Adapted from Marloth, *Flora of South Africa*, vol. 4, p. 50.)

58029. NICOTIANA TABACUM L. Solanaceae. Tobacco.

From Teheran, Persia. Seeds presented through Bernard Gottlieb, American consul. Received October 4, 1923.

Seeds of the finest grade of the Persian tobacco variety known as *Shiraz Tumbac*. (Gottlieb.)

Introduced for tobacco specialists.

58030. ANNONA DIVERSIFOLIA Safford.
Annonaceae. Ilima.

From Chiapas, Mexico. Seeds presented by Dr. C. A. Purpus, Zacuapan, Huatusco, Vera Cruz. Received October 6, 1923.

It is now several years since the Office of Foreign Plant Introduction undertook an investigation of this little-known relative of the cherimoya and decided that it is a species worthy of wide cultivation in the Tropics. In these few years several thousand seedlings have been distributed, not alone in America but also in southern Asia and elsewhere. A young tree growing in the United States Plant Introduction Garden at Miami, Fla., came into bearing in 1923. So far as known, this is the first time ilimas have been produced in the United States. The tree has always been very limited in its distribution. It is native to southern Mexico, Guatemala, and Salvador, where it is found usually in foothill regions at elevations not greater than 2,000 feet. In some parts of Mexico it is called "ilima," in Chiapas "papauce," and in Guatemala and Salvador "anona blanca."

The climatic requirements of this tree are similar to those of the sugar-apple and the custard-apple. It will withstand light frost and often grows in regions where the rainfall is light. Seedling trees come into bearing when 4 or 5 years old. The species is not as robust as the cherimoya, rarely reaching more than 20 feet in height and being of somewhat slender growth. The fruit is conical, oval, or round, and weighs from half a pound to a pound or more. The surface is rough, with the capillary areas indicated by deeply incised lines. The color varies from pale green to magenta pink, overspread with a whitish bloom, whence the common name "anona blanca," or "white anona." In pale-green varieties the flesh is pure white; in pink kinds it is tinged with that color. The flavor is similar to that of the sugar-apple but with more acid. The seeds are about as numerous as in the cherimoya but slightly larger than those of the latter.

58031. MANGIFERA INDICA L. Anacardiaceae. Mango.

From Manila, Philippine Islands. Budwood presented by Adn. Hernandez, director, Bureau of Agriculture. Received October 6, 1923.

"Carabao." Average weight 230 grams; form oblong, asymmetrical, with full cheeks; ventral shoulder usually prominent; dorsal shoulder short; stem inserted squarely or obliquely; base rounded; beak rather indistinct and variable, sometimes coinciding with apex; nak about 15 to 25 millimeters above apex, usually not prominent; surface smooth; color yellowish tinged with green; lentils light yellow, usually sparse at basal end of fruit, abundant on apical portion; skin medium thin, tough; flesh yellowish, paler than the *Pico*,

very tender and melting; flavor very delicate, aromatic, and spicy; fiber medium coarse, short, confined almost entirely to edges of seed; seed oblong, medium large; polyembryonic. The similarities in the fruit and trees of the *Carabao* and the *Cambodiana*, introduced into Florida from Saigon, Cochín China, are so many and great that the two types would seem to have a common parentage or to have sprung one from the other; this fact perhaps may also indicate the original home of the *Carabao* mango.

"The tree is of vigorous growth, with fruit mostly ripening from the latter part of May through June and the early part of July; by smoking the trees (the physiological effect of which is not quite understood) and by chopping the bark of the trunk the Filipinos force the trees to bear fruit early in March, but this fruit is not so well flavored as that produced later. In some sections a few mangos are found in the markets during nearly all the months of the year." (P. J. Wester, *Bulletin No. 18, Bureau of Agriculture, Manila*, pp. 23 and 24.)

58032. STRYCHNOS SUBEROSA Wildem.
Loganiaceae.

From Kisanu, Belgian Congo. Seeds presented by Frère J. Gillet. Received October 1, 1923.

The fruit of this species is edible. (Gillet.)

A spiny shrub or small tree, with oval leathery dull-green leaves. It is very similar to *Strychnos gilletii* [S. P. I. No. 58020]. (Adapted from *Annales du Musée du Congo*, ser. 5, vol. 1, p. 177.)

58033. AVENA STERILIS L. Poaceae. Oats.

From Lincoln, New Zealand. Seeds presented by Dr. F. W. Hilgendorf, biologist, Canterbury Agricultural College. Received October 10, 1923.

"*College Algerians*. This strain, also known as A 86, is characterized by high tillering power, a creeping habit, quick recovery after feeding off, and a high yield. Under our conditions of climate and soil it has yielded about 10 bushels per acre more than commercial varieties sown under the same conditions." (*New Zealand Journal of Agriculture*, vol. 26, p. 147.)

58034. SACCARUM OFFICINARUM L. Poaceae. Sugar cane.

From Rio Piedras, Porto Rico. Cuttings presented by R. Menendez Ramos, director, Insular Experiment Station. Received October 10, 1923.

B. H. 10 (12). This Barbados hybrid is, in my opinion, the most valuable cane seedling at present planted on this island. It is a vigorous cane, giving high tonnage in a variety of soils; it is a heavy stooler and good in ratoon crops. At this station it has yielded as high as 22 per cent sucrose in crusher juice at the age of 13 months. It is tolerant to both mosaic and gumming diseases. (Ramos.)

58035. HIBISCUS ROSA-SINENSIS L. Malvaceae.

From Manila, Philippine Islands. Cuttings presented by Adn. Hernandez, director, Bureau of Agriculture. Received October 17, 1923.

The Chinese Hibiscus is an exceedingly popular ornamental plant in southern Florida, where the single scarlet variety is practically the only one which has been commonly planted up to this time. The department has undertaken to introduce the best forms from other parts of the world, in the hope of diversifying somewhat the ornamental plantings of Florida gardens. The scarlet variety, though a handsome and useful plant, is in danger of becoming monotonous. An excellent collection of new varieties has recently been introduced from the Hawaiian Islands, where much has been done to improve this genus by breeding.